

## Analysis of Environmental Quality towards Satisfaction of Users in Mashhad Housing Complexes

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### Expanded Abstract

#### Introduction

A hundred years of relentless development in economic and political system and lack of available land puts the idea of mass housing and residential complexes forward in urban areas. What is noticeable through this process in Iran is that the principles and guidelines of urban development in planning and design were declined significantly in most of the residential complexes. This decline caused these places to take the creation of optimal environment for granted and consequently brought about the dissatisfaction of the residents. The first step to have a favorable environment and the satisfaction of residents is to pinpoint the major satisfaction factors. This could be useful for analyzing the current residence status, planning for improving life quality in the complexes, and preventing the recurrence of defects. Given that, the present article evaluates the level of satisfaction of those who live in residential complexes of Mashhad City, as the second metropolis of Iran. The research method of this descriptive-analytical study and data collection procedures are documental and survey (questionnaire), respectively. LISREL Software and structural equation modeling method were used for data analysis. According to the results, all environmental quality factors including functional, experimental-aesthetic, and environmental affect the level of residential satisfaction. There is a significant relationship between functional factors and personal, social, and cultural sub-factors, but there is no relationship between the so-called factors and the environmental sub-factors.

According to Carney, the residents introduced social factors as the most significant satisfaction criteria, while planners, designers, and architects focus more on physical and structural features. Some older studies, like studies of Karp, were also examined the problem. He stated that neighborhood features contribute more on the level of satisfaction than physical characteristics in elderly residents. In cases that people were satisfied with their neighbors, residential satisfaction was at a favorable level either, even if other residential factors were not satisfactory. Potter and Cantarero declared that physical factors are more privileged for modern residents, but those with longer residence record prefer the social factors and interaction with neighbors as the most. Billups counted neighborly relations, partnership, and mutual values as effective social factors in residential satisfaction.

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Based on the results of Carney's research, residents consider social factors as the most important criteria of satisfaction, while planners, designers and architects show more attention to the physical characteristics. It should be mentioned that this issue was also raised in the older studies such as Karp's (1966) research. Based on his research, neighbourhood characteristics are more involved in determining satisfaction of elderly residents than physical characteristics. In cases where people are satisfied with their neighbours, satisfaction with the residential environment is very high, even when other factors are not satisfactory enough. According to Potter and Kantarro (2006) for new residents, physical factors are considered important in satisfaction, while for those with a longer history of settlement, social factors and interaction with neighbours are considered more important. Bylups also considers neighbourhood relations, cooperation and shared values of people as social determinants of resident satisfaction.

### Methodology

This paper is descriptive-analytical in terms of research method and functional in terms of objective. Data were gathered through documentation (library resources) and survey (questionnaire) method. The content validity of the questionnaire was confirmed by related professors and experts. The Cronbach's alpha method was used for the reliability of the questionnaires. The calculated pretest alpha for all items is higher than 0.7, which is indicative of high reliability of research instruments.

Current research is analytical-descriptive in terms of methodology, and applied in terms of purpose. Data are collected using document-based (based on library resources) and survey (questionnaire) methods. The validity of the questionnaire was confirmed by professionals and experts, and Cronbach's alpha was used to test reliability. The alpha value obtained from the pre-test check for all items was higher than 0.7, indicating very high reliability of research tool.

### Conclusions

Environmental factors are more influential on the satisfaction of residents than other factors (personal, social, and cultural). In addition, each of these factors has significant relations with each other. Functional factors are interrelated with aesthetic-empirical factors. The aesthetic-empirical factors are interrelated with environmental factors, and functional factors are interrelated with environmental factors and the other factors (personal, social, and cultural). In addition, each of the aesthetic-empirical and environmental factors has significant relation with architectural elements, environmental factors and other factors (personal, social, and cultural). This can be justified as the respondents are almost homogenous in terms of personal, social and cultural conditions, since the sale rules and regulations of the units of complexes lead to attraction of people who have commonalities in terms of education, income and social and cultural factors. This is also observed in the descriptive findings. Therefore, people have a higher satisfaction with personal, social and cultural factors and there are very little problems from this perspective.

Environmental factors affect more significantly the level of residential satisfaction than other personal, social, and cultural factors. Moreover, the factors have a significant relationship with each other in this study. For example, functional factors have a significant relationship with experimental-aesthetic factors, experimental-aesthetic with environmental and functional factors with environmental and other personal, social, and cultural factors. Furthermore, each experimental-aesthetic and environmental factor has a significant relationship with architectural, environmental, and other personal, social, and cultural factors. This could be due to the fact that, all respondents enjoy from a similar personal, social, and cultural factors, in that the terms of sale of residential units under study will result in attraction of households with more commonalities in terms of education, income, and sociocultural factors. The results can be seen in descriptive findings. Therefore, people are more satisfied with personal, social, and cultural factors and fewer problems are existed regarding the issue.

**Keywords:** environmental quality factors, Mashhad, residential complexes, satisfaction, users.

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